

Appl. No. 10/523,472
Amdt. Dated January 24, 2008
Reply to Office Action of September 24, 2007

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 3. This sheet, which includes Figs. 3 – 4, replaces the original sheet including Figs. 3 – 4. In Fig. 3, the structures recited in claim 23, line 5, are now shown.

Attachments: Replacement Sheet
 Annotated Sheet Showing Changes

REMARKS/ARGUMENTS

The present amendment is submitted in response to the Office Action dated September 24, 2007, which set a three-month period for response. Filed herewith is a Request for a One-month Extension of Time, making this amendment due by January 24, 2008.

Claims 13-24 are pending in the application.

In the Office Action, the drawings were objected to under 37 CFR 1.83(a) as not showing every feature of the invention specified in the claims, specifically, the structures recited in claim 23, line 5. In addition, the Applicant was required to elect a single species for further prosecution, specifically, Species I, claims 13-15, the seatbelt retractor of Fig. 1; Species II, claims 13, 14, and 16, the seatbelt retractor of Fig. 2; Species III, claims 13, 14, 17-21, 23, and 24, the seatbelt retractor of Figs. 3-5; or Species IV, claims 13, 14, and 22, the seatbelt retractor disclosed on page 7, lines 9-15. A provisional election of Species II, claims 13, 14, 17-21, 23, and 24 was made on September 17, 2007. Claims 13, 14, 17-21, 23, and 24 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite. Claims 13, 14, 17-19, 23, and 24 were rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,842,657 to Modzelewski in view of U.S. Patent No. 6,105,893 to Schmidt et al. Claim 20 was rejected under 35 U.S.C. 103(a) as being unpatentable over Modzelewski in view of Schmidt et al as applied to claim 18 above, and further in view of U.S. Patent No. 6,065,704 to Pywell et al. Claim 21 was rejected under 35 U.S.C. 103(a) as being unpatentable over Modzelewski in view of Schmidt et al as applied to claim 18 above, and further in view of U.S. Pat. App. Pub. No. 2002/0109029 to Stevens.

Turning first to the objection to the drawings, filed herewith is amended Fig. 3, which shows the structures 42 designed to give way to a preset force application, as recited in claim 23, line 5. The specification has been amended accordingly.

Regarding the provisional election of Species III, claims 13, 14, 17-21, 23, and 24, the Applicant hereby affirms this election.

The claims have been amended to address the rejections under Section 112, second paragraph.

Regarding the objection to the language in claim 13, line 9, however, the Applicant respectfully disagrees that this language is unclear or indefinite. The tensioning drive is not mounted in the housing, rather a connection between the first component of the tensioning drive and the housing is created first by the displacement of the blocking element. Otherwise, the rotation of the tensioning element with the belt shaft also would not be enabled at all.

The objection to lines 21-23 of claim 13 also is not understood, as the language regarding the objected-to feature is clear. If during the tensioning process, the second component rotates relative to the first component fixed via the blocking element on the housing, then this relative rotation is free in the winding direction, while the return stop is operative in the reverse direction. The Applicant respectfully submits that this feature is clearly defined in claim 13, lines 21-23.

Looking next at the substantive rejections of the claims, the Applicant respectfully disagrees that the cited references render obvious the present invention as defined in the pending claims.

The basic idea and essence of the present invention are described in the specification on page 4, second paragraph. The tensioning drive made of two components, is secured to the belt shaft as a common unit *before triggering of the tensioning drive* without a connection to the housing of the belt winding device and in this regard, rotates commonly with the belt shaft. Only upon impingement of the tensioning device with a corresponding drive medium (i.e., a pyrotechnically produced gas), does a relative rotation of the tensioning drive relative to the belt shaft first take place. Next, displacement of a blocking

element (by means of which this first component of the tensioning device is attached to the housing) disposed on the first component of the tensioning device occurs. By means of this attachment, the first component of the tensioning device is displaced into the position to form an end stop for the rotation of the second component of the tensioning drive relative to the first component, so that the winding of the seat belt takes place by the tensioning drive via the second component of the tensioning drive, which rotates relative to the blocked first component. To this extent, at this time point of the tensioning process, a type of "recoil principle" for the rotation of the second component of the tensioning device relative to the first component is effective. Thus, an override in the winding direction exists between the first and second components of the tensioning drive, while in the reverse direction, a return stop or lock is effective in order to prevent a reverse rotation of this component during the tensioning rotation of the second component of the tensioning drive.

A type of return stop actually is disclosed in Schmidt, because with this device, the reliability of the tensioning device is increased. However, the return stop described in Schmidt relates to another design of a tensioning drive. The Examiner combines Schmidt with Modzelewski, which shows a tensioning drive with two components, to argue that the present invention is unpatentable under Section 103. The Applicant respectfully disagrees and submits that the structure of the tensioning device in Modzelewski is not comparable to the constructive components of the tensioning drive according to the present invention.

The Examiner appears to be referring to the embodiment shown in Fig. 9 of Modzelewski, because only with this embodiment is the tensioning device disposed in the belt shaft. The embodiments of Figs. 2 and 3 show different technical solutions with a tensioning drive arranged outside of the belt shaft, so that these solutions are not comparable with the basic structure of the present invention.

As described above, the tensioning device according to the present invention is made up of two components which are moveable relative to one another during the

tensioning process and which rotate commonly with the belt shaft before triggering of the tensioning device. The Examiner compares these components with the fixed gas generator 74a and the output shaft 64a of Modzelewski. Again, the Applicant disagrees with this analysis.

In spite of the two components of the tensioning device that rotate with the belt shaft in the present invention, the invention still provides a fixed gas generator (29, Fig. 3), which to this extent does NOT form a component of the actual two-part tensioning device. Thus, also the gas generator 74a of Modzelewski cannot be compared with the components of the tensioning device of the present invention.

The tensioning device in Modzelewski is comprised of two components 70a and 64a. However, these components are not moveable relative to one another, but instead are connection non-rotatably to one another (see Modzelewski, column 4, lines 20-27, and column 6, lines 6-12), so that the parts 70a and 64a can be viewed also as a single component.

Finally, Modzelewski does not provide any blocking element as part of the tensioning drive, because the part 68a represents a coupling between the output shaft 64a as the tensioning drive and the belt shaft 140, without which the rotation of the tensioning drive could not be transferred into a rotation of the belt shaft. In Modzelewski, this coupling is necessary, because before triggering of the tensioning drive, the tensioning drive is stationary and the belt shaft rotates about the fixed tensioning device. In contrast, the present invention contemplates that the tensioning drive (without a connection to the housing) rotates before triggering commonly with the belt shaft, and therefore, a coupling connection between the tensioning drive and the belt shaft is not necessary.

In Modzelewski, upon the triggering of the tensioning device, the gas flowing into the twist-tube body 70a leads to a deformation of the twist-tube body 70a about its own axis, whereby the non-rotatably output shaft 64a non-rotatably connected therewith is rotated.

This rotational movement is transferred after uncoupling of the belt shaft 140 via the clutch 68a to the shaft body 140.

In conclusion, accordingly the following features of the tensioning drive of the present invention are *not* disclosed or suggested by Modzelewski:

- a) two-part structure of the tensioning drive with two components that are moveable relative to one another;
- b) rotation of both components of the tensioning drive commonly with the belt shaft before triggering of the tensioning device;
- c) locking of a first component of the tensioning device with the housing;
- d) function of the first component of the tensioning device as an end stop for the rotation of the second component of the tensioning device according to the recoil principle.

The above differences between Modzelewski and the present invention make clear that the structures of the two tensioning devices are not comparable in any sense. Further, Modzelewski provides no motivation that would lead the practitioner to the present invention, even if this reference were combined with Schmidt, for the reasons set forth above. The present invention represents a completely new concept and design for a tensioning drive, which is not known from the prior art.

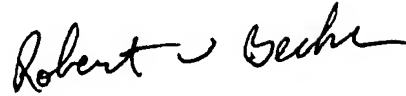
It is respectfully submitted that since the prior art does not suggest the desirability of the claimed invention, such art cannot establish a prima facie case of obviousness as clearly set forth in MPEP section 2143.01. Please note also that the modification proposed by the Examiner would change the principle of operation of the prior art, so that also for this reason the references are not sufficient to render the claims prima facie obvious (see the last paragraph of the aforementioned MPEP section 2143.01).

The application in its amended state is believed to be in condition for allowance. However, should the Examiner have any comments or suggestions, or wish to discuss the merits of the application, the undersigned would very much welcome a telephone call in order to

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expedite placement of the application into condition for allowance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Robert W. Becker". The signature is fluid and cursive, with a large initial "R" and a stylized "B".

Robert W. Becker, Reg. 26,255
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Attachments

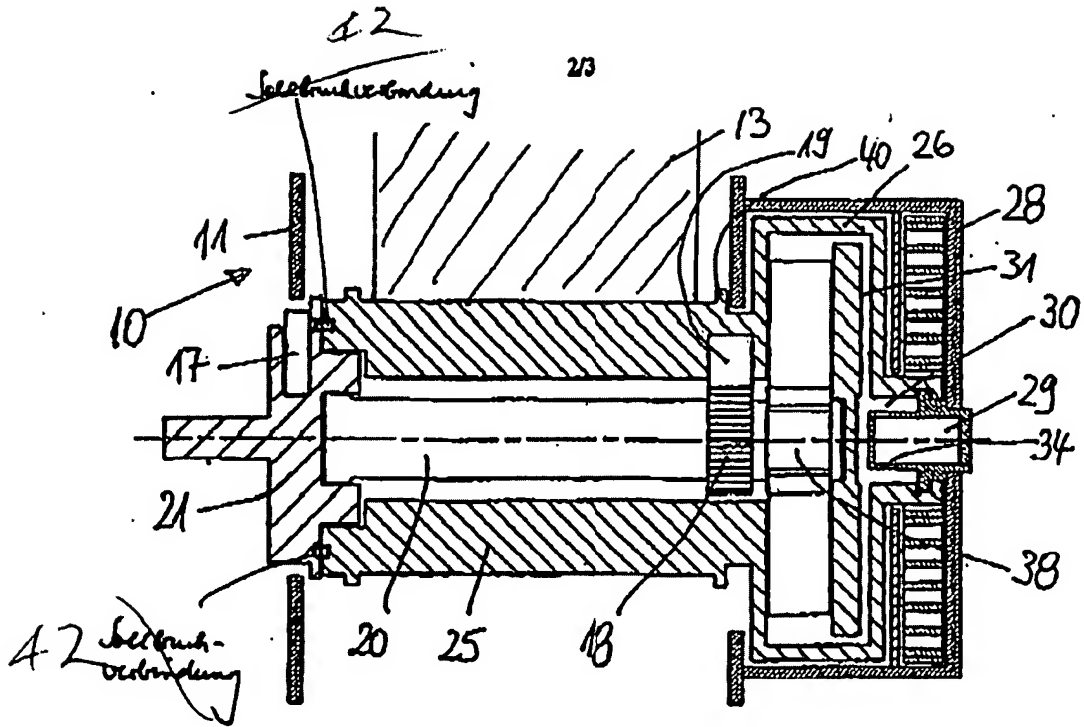


Fig. 3

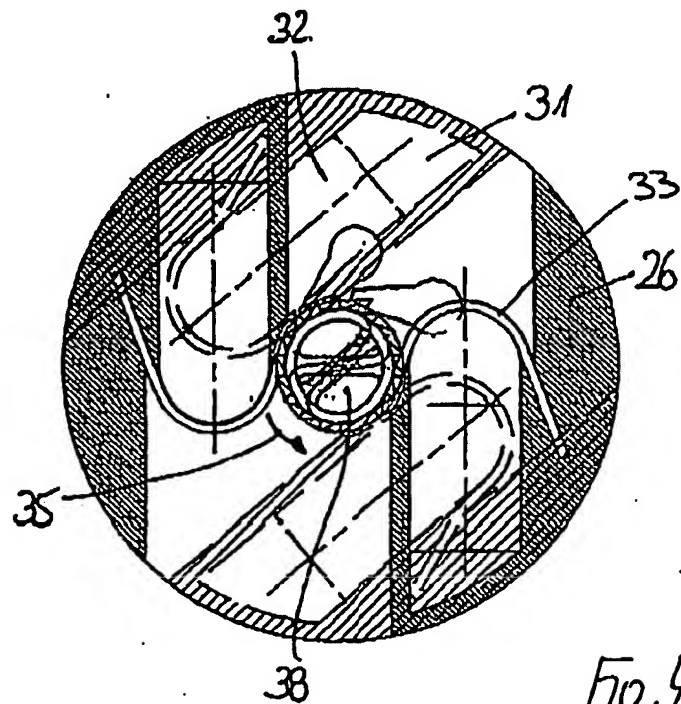


Fig. 4